

Local discordance

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The images visualize a single-chain proteins with two forms of discordance present: local deficiency and local excess. The first one assumed to be ready to interact with other molecules (including substrate) and to be ready for complexation using the local hydrophobicity excess on the surface as the target area for protein-protein complexation.

Local discordance is understood as local hydrophobicity deficiency or local hydrophobicity excess. The first one appears to be related to the presence of cavity. The second one—particularly when the exposure takes place on the surface—may suggest potential protein-protein complexation area.

Presence of cavity allows substrate binding—as it is shown for enzymes, as well as the permanent ligand binding. The examples for both cases are shown in this chapter.